THAT WHICH IS CLAIMED:

1. A method for automatically generating a subset of components from a plurality of components, comprising:

receiving a request to generate a subset of components;

accessing connectivity data comprising information regarding at least the plurality of components and connections among the plurality of components; and

automatically selecting portions of the connectivity data that satisfy the request to generate the subset of components.

2. The method of claim 1, further comprising displaying the diagram of the subset of components.

3. The method of claim 1, wherein receiving a request comprises receiving a unique name of at least one component desired in the subset of components.

4. The method of claim 1, wherein receiving a request comprises receiving a description of at least one component desired in the subset of components.

5. The method of claim 1, wherein receiving a request comprises receiving a request for the subset of components that connect at least two other components, and wherein automatically selecting portions of the connectivity data comprises selecting portions of the connectivity data that create at least one path between the at least two other components.

6. The method of claim 1, wherein receiving a request comprises receiving a request for the subset of components that connect a source component to a sink component, and wherein automatically selecting portions of the connectivity data comprises selecting portions of the connectivity data that create at least one path between the source component and the sink component.

7. The method of claim 1, wherein receiving a request comprises receiving a request for the subset of components that connect a respective component

to at least one of a source component and a sink component, and wherein automatically selecting portions of the connectivity data comprises selecting portions of the connectivity data that create at least one path between the respective component and at least one of the source component and the sink component.

8. The method of claim 1, wherein receiving a request comprises receiving a request for the subset of components that comprises at least one of an Airline Transport Association (ATA) system and a Unified Numbering System (UNS), and wherein automatically selecting portions of the connectivity data comprises selecting portions of the connectivity data that include the components of the at least one of the ATA system and the UNS and that create at least one path among the components of the at least one of the ATA system and the UNS.

9. The method of claim 1, wherein receiving a request comprises receiving a request for the subset of components that comprises at least one figure-sheet set specification, and wherein automatically selecting portions of the connectivity data comprises selecting portions of the connectivity data that include the components of the at least one figure sheet set specification and that create at least one path among the components of the at least figure sheet set specification.

10. The method of claim 1, further comprising:

removing at least one component from the automatically selected portions of the connectivity data that satisfy the request for the subset of components; and

directly connecting the components that attach to a removed component prior to generating the diagram of the subset of components.

11. The method of claim 1, wherein receiving a request comprises receiving a request for the subset of components that comprises at least one of a maximum number of components and a maximum number of connections, and wherein automatically selecting portions of the connectivity data comprises selecting portions of the connectivity data that satisfy the at least one requested maximum number of components and maximum number of connections.

12. The method of claim 1, wherein receiving a request comprises receiving a request for the subset of components that comprise a path that is located a predefined distance away from a respective component, and wherein automatically selecting portions of the connectivity data comprises selecting portions of the connectivity data that include the path that is located the predefined distance away from the respective component.

13. The method of claim 1, further comprising generating a diagram of the subset of components from the portions of the connectivity data that satisfy the request for the subset of components.

14. The method of claim 13, further comprising adding at least one component to the subset of components after generating the diagram of the subset of components and re-generating a diagram of the subset of components including the at least one added component.

15. The method of claim 13, further comprising removing at least one component from the subset of components after generating the diagram of the subset of components and re-generating a diagram of the subset of components without the at least one removed component.

16. The method of claim 1, wherein receiving a request comprises receiving a request for the subset of components included in a repair log, and wherein automatically selecting portions of the connectivity data comprises selecting portions of the connectivity data that include the components included in the repair log.

17. The method of claim 16, wherein automatically selecting portions of the connectivity data further comprises selecting portions of the connectivity data that create at least one path among the components included in the repair log.

18. The method of claim 1, wherein receiving a request comprises receiving a request for the subset of components included in a maintenance procedure, and wherein automatically selecting portions of the connectivity data comprises

selecting portions of the connectivity data that include the components included in the maintenance procedure.

19. The method of claim 18, wherein automatically selecting portions of the connectivity data further comprises selecting portions of the connectivity data that create at least one path among the components included in the maintenance procedure.

20. A system for automatically generating a subset of components from a plurality of components, comprising:

a client element capable of receiving a request to generate a subset of components from a user;

a storage element capable of storing connectivity data comprising information regarding at least the plurality of components and the connections among the plurality of components; and

a processing element capable of automatically selecting portions of the connectivity data from said storage element that satisfy the request from said client element to generate the subset of components.

21. The system of claim 20, further comprising a display element capable of displaying the diagram of the subset of components.

22. The system of claim 20, wherein said client element is also capable of receiving a request for the subset of components that connect at least two other components, and wherein said processing element is also capable of automatically selecting portions of the connectivity data that create at least one path between the at least two other components.

23. The system of claim 20, wherein said client element is also capable of receiving a request for the subset of components that connect a source component to a sink component, and wherein said processing element is also capable of automatically selecting portions of the connectivity data that create at least one path between the source component and the sink component.

24. The system of claim 20, wherein said client element is also capable of receiving a request for the subset of components that connect a respective component to at least one of a source component and a sink component, and wherein said processing element is also capable of automatically selecting portions of the connectivity data that create at least one path between the respective component and at least one of the source component and the sink component.

25. The system of claim 20, wherein said client element is also capable of receiving a request for the subset of components that comprises at least one of an Airline Transport Association (ATA) system and a Unified Numbering System (UNS), and wherein said processing element is also capable of automatically selecting portions of the connectivity data that include the components of the at least one of the ATA system and the UNS and that create at least one path among the components of the at least one of the ATA system and the UNS.

26. The system of claim 20, wherein said client element is also capable of receiving a request for the subset of components that comprises at least one figure-sheet set specification, and wherein said processing element is also capable of automatically selecting portions of the connectivity data that include the components of the at least one figure sheet set specification and that create at least one path among the components of the at least figure sheet set specification.

27. The system of claim 20, wherein said processing element is further capable of removing at least one component from the automatically selected portions of the connectivity data that satisfy the request for the subset of components and directly connecting the components that attach to a removed component.

28. The system of claim 20, wherein said client element is also capable of receiving a request for the subset of components that comprises at least one of a maximum number of components and a maximum number of connections, and wherein said processing element is also capable of automatically selecting portions of

the connectivity data that satisfy the at least one requested maximum number of components and maximum number of connections.

29. The system of claim 20, wherein said client element is also capable of receiving a request for the subset of components that comprise a path that is located a predefined distance away from a respective component, and wherein said processing element is also capable of automatically selecting portions of the connectivity data that include the path that is located the predefined distance away from the respective component.

30. The system of claim 20 further comprising a generation element capable of generating a diagram of the subset of components from the portions of the connectivity data that were determined by said processing element to satisfy the request to generate the subset of components.

31. The system of claim 30, wherein said processing element comprises said generation element.

32. The system of claim 30, wherein said processing element is further capable of adding at least one component to the subset of components after the diagram of the subset of components is generated and said generation element is also capable of re-generating a diagram of the subset of components including the at least one added component.

33. The system of claim 30, wherein said processing element is further capable of removing at least one component from the subset of components after the diagram of the subset of components is generated and said generation element is also capable of re-generating a diagram of the subset of components without the at least one removed component.

34. The system of claim 20, wherein said client element is also capable of receiving a request for the subset of components included in a repair log, and wherein

said processing element is also capable of automatically selecting portions of the connectivity data that include the components included in the repair log.

35. The system of claim 34, wherein said processing element is further capable of automatically selecting portions of the connectivity data that create at least one path among the components included in the repair log.

36. The system of claim 20, wherein said client element is also capable of receiving a request for the subset of components included in a maintenance procedure, and wherein said processing element is also capable of automatically selecting portions of the connectivity data that include the components included in the maintenance procedure.

37. The system of claim 36, wherein said processing element is further capable of automatically selecting portions of the connectivity data that create at least one path among the components included in the maintenance procedure.

38. A computer program product for automatically generating a subset of components from a plurality of components, the computer program product comprising a computer-readable storage medium having computer-readable program code portions stored therein, the computer-readable program code portions comprising:

a first executable portion capable of receiving a request to generate a subset of components from a user;

a second executable portion capable of providing connectivity data comprising information regarding at least the plurality of components and the connections among the plurality of components; and

a third executable portion capable of automatically selecting portions of the connectivity data provided by said second executable portion that satisfy the request to generate the subset of components that is received by said first executable portion.

39. The computer program product of claim 38, wherein said first executable portion is also capable of receiving a request for the subset of components that connect at least two other components, and wherein said third executable portion

is also capable of automatically selecting portions of the connectivity data that create at least one path between the at least two other components.

40. The computer program product of claim 38, wherein said first executable portion is also capable of receiving a request for the subset of components that connect a source component to a sink component, and wherein said third executable portion is also capable of automatically selecting portions of the connectivity data that create at least one path between the source component and the sink component.

41. The computer program product of claim 38, wherein said first executable portion is also capable of receiving a request for the subset of components that connect a respective component to at least one of a source component and a sink component, and wherein said third executable portion is also capable of automatically selecting portions of the connectivity data that create at least one path between the respective component and at least one of the source component and the sink component.

42. The computer program product of claim 38, wherein said first executable portion is also capable of receiving a request for the subset of components that comprises at least one of an Airline Transport Association (ATA) system and a Unified Numbering System (UNS), and wherein said third executable portion is also capable of automatically selecting portions of the connectivity data that include the components of the at least one of the ATA system and the UNS and that create at least one path among the components of the at least one of the ATA system and the UNS.

43. The computer program product of claim 38, wherein said first executable portion is also capable of receiving a request for the subset of components that comprises at least one figure-sheet set specification, and wherein said third executable portion is also capable of automatically selecting portions of the connectivity data that include the components of the at least one figure sheet set specification and that create at least one path among the components of the at least figure sheet set specification.

44. The computer program product of claim 38, wherein said third executable portion is further capable of removing at least one component from the automatically selected portions of the connectivity data that satisfy the request for the subset of components and directly connecting the components that attach to a removed component.

45. The computer program product of claim 38, wherein said first executable portion is also capable of receiving a request for the subset of components that comprises at least one of a maximum number of components and a maximum number of connections, and wherein said third executable portion is also capable of automatically selecting portions of the connectivity data that satisfy the at least one requested maximum number of components and maximum number of connection paths.

46. The computer program product of claim 38, wherein said first executable portion is also capable of receiving a request for the subset of components that comprise a path that is located a predefined distance away from a respective component, and wherein said third executable portion is also capable of automatically selecting portions of the connectivity data that include the path that is located the predefined distance away from the respective component.

47. The computer program product of claim 38, further comprising a fourth executable portion capable of generating a diagram of the subset of components from the portions of the connectivity data that satisfy the request for the subset of components that is selected by said third executable portion.

48. The computer program product of claim 47, wherein said third executable portion comprises said fourth executable portion.

49. The computer program product of claim 47, wherein said third executable portion is further capable of adding at least one component to the subset of components after the diagram of the subset of components is generated and said

fourth executable portion is also capable of re-generating a diagram of the subset of components including the at least one added component.

50. The computer program product of claim 47, wherein said third executable portion is further capable of removing at least one component from the subset of components after the diagram of the subset of components is generated and said fourth executable portion is also capable of re-generating a diagram of the subset of components without the at least one removed component.

51. The computer program product of claim 38, wherein said first executable portion is also capable of receiving a request for the subset of components included in a repair log, and wherein said third executable portion is also capable of automatically selecting portions of the connectivity data that include the components included in the repair log.

52. The computer program product of claim 51, wherein said third executable portion is further capable of automatically selecting portions of the connectivity data that create at least one path among the components included in the repair log.

53. The computer program product of claim 38, wherein said first executable portion is also capable of receiving a request for the subset of components included in a maintenance procedure, and wherein said third executable portion is also capable of automatically selecting portions of the connectivity data that include the components included in the maintenance procedure.

54. The computer program product of claim 53, wherein said third executable portion is further capable of automatically selecting portions of the connectivity data that create at least one path among the components included in the maintenance procedure.

55. The computer program product of claim 38, further comprising a fifth executable portion capable of displaying the diagram of the subset of components.